



## Change List for Win7 Driver 8.0.0.144 to 8.0.0.259

Draft November/20/2009

**Atheros is continuing Hot Fixes. This will be a list of running changes as we continue to fix defects against Win7 8.0.0.x base code.**

### Software changes between build 8.0.0.144 and 8.0.0.162 (SID:1335625)

- 1) Add generic INF entries.
- 2) Prepare driver to support HB97/MB97. It is currently not officially supported.
- 3) Added Win7 and Server 2008 INF support.
- 4) Fixed synchronization issue between ndisPauseMiniport and the OIDs processing.
- 5) Incremented the reference count of the node used by scan to transmit probe requests.
- 6) Fixed HB93 can't connect by Adhoc after driver disable/enable.
- 7) Fixed Background scan interrupts data transfer via IEEE1394. Enable registry analogShiftRegDelay to add delay after writes to analog shift registers.
- 8) Fixed BSOD when AP disassociate clients.
- 9) Fixed Cisco AP's TPC causes low throughput with XB62. Add a registry key to specify the lowest tx power we can support.
- 10) Report SoftAP's current PhyId in association completion indication.
- 11) Limit the duration of a single roaming attempt to 20 seconds.
- 12) Take VAP out of RUN state when SW beacon miss is detected.
- 13) Fixed driver shows legacy link speed with 11n AP.
- 14) Fixed HB95 causing high CPU utilization while Radio-off.
- 15) Fixed driver is deleting a lock that is still owned by a thread.
- 16) Fixed problem causing scan to try to transmit fake sleep and fake wake up even if client is not connected.
- 17) Fixed problem causing scan to visit first foreign channel even in the presence of traffic.
- 18) Added a new OID and supporting interfaces to get chain specific noise floor values.

### Software changes between build 8.0.0.162 and 8.0.0.171 (SID:1338646)

- 19) Add generic INF entries.
- 20) Fixed Driver is indicating receive NBLs at passive level with NDIS\_RECEIVE\_FLAGS\_DISPATCH\_LEVEL set.
- 21) Fixed problem causing scan entries never to be aged out if AP is restarted with different SSID.
- 22) Fixed cleaning up RFKill polling when power state set to D3.
- 23) Fixed 9F Bugcheck caused by timer cancellation not handled properly.
- 24) Fixed Driver fails to free its pool allocations prior to unloading.
- 25) Fixed HB95 has low throughput with Cisco1250.
- 26) Fixed scan list shows APs with channel 14 though SKU disables ch 14.
- 27) Fixed completing all tx packets when radio disabled by hardware RFKill.



## Change List for Win7 Driver 8.0.0.144 to 8.0.0.259

Draft November/20/2009

- 28) Fixed incorrect link speed in "Wireless Network Connection Status" when cwmMode = 0.
- 29) Fixed BSOD Once Switching to Turbo.

### Software changes between build 8.0.0.171 and 8.0.0.177 (SID:1339809)

- 30) Added generic INF entries.
- 31) Officially support HB97/MB97.
- 32) Fixed BSOD caused by MLME operations not serialized when freeing the node structure.
- 33) Fixed BSOD caused by trying to generate beacon associated with a non-existing vap.
- 34) Fixed missed MKK12 freq.5170-5230 power limit from 23dbm to 20dbm.
- 35) Fixed miniport halted without successfully canceling all its timers by checking cancel flag before re-arming the timer.
- 36) Fixed BSOD caused by accessing to PortList not synchronized.
- 37) Fixed HB95 take longer time during boot on some eBOX/ePC platform.
- 38) Fixed HB93 signal bar indication issue which never goes to bar 1 before disconnected.
- 39) Fixed monitor mode shows driver always showing speed of 116Mbps.
- 40) Fixed HB91 causes noise when RF switch turned OFF.
- 41) Add deserialize key to avoid HB93 hard hang on some dual-core CPU platform.

### Software changes between build 8.0.0.177 and 8.0.0.196 (SID:1344341)

- 42) Added generic INF entries.
- 43) Fixed BSOD caused by calling Ap11StartApWorkItem after Port has been deleted.
- 44) Fixed when the Hibernate/Resume (S4) is repeated, the STA fails to connect with AP.
- 45) Clear BSS list when an explicit scan request is received from the OS with the dot11\_scan\_type\_forced bit set.
- 46) Fixed BSOD caused by two threads acquiring two spin locks in reversed order in Combined Stress test.
- 47) Fixed 64bit driver BSOD caused by wbuf getting reset before complete finishes.
- 48) Fixed BSOD happens when performing association request fuzzing for Soft AP.
- 49) Fixed HB93 signal bar indication problem by changing the RSSI range for low link quality between 0% - 20%.
- 50) Updated INI files for performance improvement.
- 51) Fixed Chariot throughput test was stopped by error when XB72 based WLAN card was connected with WZR-AGL300NH.

### Software changes between build 8.0.0.196 and 8.0.0.205 (SID:1346394)

- 52) Added generic INF entries.
- 53) Fixed radio LED status incorrect when WWAN is on and WLAN is toggled.
- 54) Modified LED blinking pattern.



## Change List for Win7 Driver 8.0.0.144 to 8.0.0.259

Draft November/20/2009

- 55) Fixed HB95 auto disconnect with adhoc mode.
- 56) Fixed Chariot throughput test was stopped by error when XB72 based WLAN card is connecting with WZR-AGL300NH.
- 57) Fixed BSOD caused by invalid VAP pointer when beacon miss detected and device error indication passed by.
- 58) Added generic shared GPIO support.
- 59) Fixed BSOD when running NDIS test.
- 60) Fixed LED not blinking when scan button is pressed.

### Software changes between build 8.0.0.205 and 8.0.0.218 (SID:1349692)

- 61) Added generic INF entries.
- 62) Fixed HB63 list fewer APs in b only mode.
- 63) Updated HB97/MB97 ini file for better performance.
- 64) Changed card bus latency of some card bus controllers to get better performance for our device.
- 65) Fixed HB95/HB65 get low throughput while it is set to single Antenna on Win7.
- 66) Added BT coex support to Windows 7.
- 67) Fixed BT coex stalls whenever TSF rolls back.
- 68) Fixed PAN connection drops when we try to do PAN DL while WIFI DL traffic is running.
- 69) Added OID for spectral analysis support. However it is not supported.
- 70) Fixed BT coex: Chariot does not start if STADUT is sending PAN traffic.
- 71) Fixed BT coex: low uplink SCO performance.
- 72) Added support to report link speed from MSFT's RX rate for tray icon.
- 71a) Solved BSOD caused by un-canceled timer. This fixed the BSOD issue relating to the MAC Address issue.

### Software changes between build 8.0.0.218 and 8.0.0.225 (SID:1356196)

- 73) Added generic INF entries.
- 74) Added support for HB95 failed to enter L1 after driver unloaded if halPcieWaen was enabled.
- 75) Added support for getting RSSI value for HB97 in 11g mode.
- 76) Fixed LED doesn't blink for any LED that uses a blinking algorithm. This is introduced from 8.0.0.218.
- 77) Added OIDs for WAPI support. It is not currently supported.
- 78) Fixed Microsoft virtual WiFi yellow bang issue by correcting MAC address generation logic issue.
- 79) Fixed potential BSOD from debug driver.

### Software changes between build 8.0.0.225 and 8.0.0.238 (SID: 1360334)

- 80) Added generic INF entries.
- 81) Fixed AFH mask is not being set when the WB195 WIFI is disabled and enabled.
- 82) Disable 802.11d beaconing in softAP mode.



## Change List for Win7 Driver 8.0.0.144 to 8.0.0.259

Draft November/20/2009

- 83) Fixed WLAN power is increasing from 30mW to 250mW, every 60 sec, even when radio is off after a reboot.
- 84) Fixed BSOD when the scan request is passed to an AP port.
- 85) Added support for HT 20/40 coexistence at 2GHz.
- 86) Added btCoexStompType, btCoexAggrLimit, and btCoexWeight registry settings for BT coex tuning.
- 87) Fix enhancement for change 70).
- 88) Added the feature to control the 802.11d Country IE and 802.11h Tx Power for the AP. The registry key to control is "enableAp80211d".
- 89) Revert change 44) because it causes connection issue with WPS AP. This is not needed for Win7.
- 90) Added official support for AR9287 Rev. 1.2.
- 91) Change LED behavior to follow PCIE 1.2[ACER].

### Software changes between build 8.0.0.238 and 8.0.0.259 (SID: 1375352)

- 90) Added generic INF entries.
- 91) Fixed wrong STAUT behavior in ACM test.
- 92) Generated the BT\_WLAN\_DISCONNECT event when both SoftAP and STA are disconnected.
- 93) Fixed de-authenticate WOW SUT test failure.
- 94) Fixed wakeup the WOW disabled STA test failure.
- 95) Fixed Station fails to associate with WPA-Optional security.
- 96) Added changes for BT AMP (3.0) feature support.
- 97) In ath\_bt\_coex\_disconnect(), changed locks sequence to avoid dead lock.
- 98) Fixed ad-hoc mode cardbus card (CB71) LED not blinking when connected.
- 99) Fixed to prevent using default value for dbg components registry value > 0xffff.
- 100) Fixed chariot disconnection issue seen while running UDP traffic.
- 101) Fixed wrong Tx WMM priority setting in the QosHeader.
- 102) Fixed [BT coex] system hang issue if plug out WB195 board while BT is searching devices.
- 103) Fixed BSOD caused by memory release not handled correctly during driver disable/enable test.
- 104) Fixed incorrect tracing message shown when link quality drops below roaming threshold.
- 105) Fixed wrong gpio pin setting for 2-wire coex case.
- 106) Fixed HB95 caused system hang up in S3/S4/S5/restart/reboot test when driver is enabled.
- 107) Fixed BSOD caused by memory free not handled correctly.
- 108) Fixed [BT coex] BSOD when running driver verifier (including athr.sys) and doing Bluetooth testing.
- 109) Fixed [BT coex] PAN throughput is very low with TCP or UDP Downlink traffic.
- 110) Added [BT Coex]: Fake sleep scheme support.



## **Change List for Win7 Driver 8.0.0.144 to 8.0.0.259**

Draft November/20/2009

- 111) Fixed WLK statistics\_ext failures .
- 112) Added 11h CSA action frame handling.
- 113) Fixed BSOD due to stack overflow.
- 114) Implemented private OID to disable scan.
- 115) Fixed wakeup WoW disable station test failure.
- 116) Fixed a wrong assertion failure message.
- 117) Enabled STBC & HT40coex registries by default and changed HB95 FIFO trigger threshold.
- 118) Updated regulatory domain.
- 119) Worked around low throughput in S3 with Pinetrail. This is a system bios bug workaround.
- 120) Fixed no scan issue when periodic scan enable is set to 0.